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09/661,195	09/13/2000	Tomoaki Hokao	Q60810	7594

	EXAMINER
	MOORE, IAN N

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Sughrue Mion Zinn Macpeak & Seas
2100 Pennsylvania Avenue N W
Washington, DC 20037-3202

ART UNIT	PAPER NUMBER
2661	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/661,195	HOKAO, TOMOAKI
	Examiner	Art Unit
	Ian N. Moore	2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>02 May 2005</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-63</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☒ Claim(s) <u>8-10, 22-24, 36-38, 48, 53 and 58-63</u> is/are allowed.
6)☒ Claim(s) <u>1-7, 11-21, 25-35, 39-47, 49-52 and 54-57</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1.   Claims 58-63 are added.

2.   Claims 1-7,11-21,25-35,39-47,49-52 and 54-57 are rejected by the new ground(s) of

rejection.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or
> described as set forth in section 102 of this title, if the differences between the subject
> matter sought to be patented and the prior art are such that the subject matter as a whole
> would have been obvious at the time the invention was made to a person having ordinary
> skill in the art to which said subject matter pertains. Patentability shall not be negatived
> by the manner in which the invention was made.

4.   Claim 1,3,4, 15,17,18.29,31 and 32 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Vilmur (US005950131A) in view of Leung (U.S. 5,623,535).

Regarding Claim 1, Vilmur discloses a mobile communication terminal equipment

(see FIG. 1, radio phone 104) for a CDMA cellular phone system (see col. 4, lines 2-11; 31-

35; CDMA system), comprising:

detection means (see FIG. 1, a combined system of ADC 110, I match 140 and Q

match 142 of searcher 114) for performing cell detection by detecting scramble codes of a

visiting cell and neighboring cell (see col. 5, lines 20-40; see col. 7, lines 20-55; detection of

PN sequences/codes of base station 102 and at all other base stations)

memory means (see FIG. 1, a combined memory 130 and 132) for storing a scramble

code (see col. 6, lines 20-34; see col. 5, lines 20-55; col. 7, lines 20-55)

control means (see FIG.1, Logic and control circuit 116) for controlling to write the

scramble codes of the visiting cell and neighboring cell, detected by said detection means,

into said memory means (see col. 4, lines 55-65; see col. 5, lines 10-25; 44-55; see col. 6,

lines 35-67; col. 7, lines 20-55;); and

measurement means (see FIG. 1, the combined system of receiver search 114 and

controller 116) for measuring detection of frequencies of the scramble codes (see FIG. 1, a

combined memory 130 and 132; see col. 5, lines 10-55; see col. 7, lines 20-55; see col. 6,

lines 20-34; note that the combined system calculate/determine/measure the

number/frequency of each PN sequence/codes for the combined memory).

Vilmur does not explicitly disclose measuring detection of intra-cell stay times.

However, the above-mentioned claimed limitations are taught by Leung. In particular, Leung

teaches measuring detection of frequencies of cells/base stations (see col. 2, lines 30-35 55;

see col. 8, lines 35-55) and intra-cell stay times (see FIG. 2, step 120 and see FIG. 3A, the

mobile unit measures/collects/stores the number of cells/base stations and the amount of time

it spends in a each cell; see col. 2, line 19-24).

In view of this, having the system of Vilmur and then given the teaching of Leung, it

would have been obvious to one having ordinary skill in the art at the time the invention was

made to modify the system of Vilmur, by providing a mechanism of a mobile station

measuring/collecting the amount of time it spends in each cell, as taught by Leung. The

motivation to combine is to obtain the advantages/benefits taught by Leung since Leung

states at col. 1, line 45-48 that such modification would provide an improved arrangement for controlling the operation of cellular system which makes efficient use of network resources.

Regarding Claim 3, the combined system of Vilmur and Leung discloses all aspects of the claimed invention set forth in the rejection of Claim 1 as described above. Vilmur further discloses automatically store the scramble codes in said memory means (see FIG. 1, Logic and control circuit 132; see col. 4, lines 55-65; see col. 5, lines 10-25; 44-55; see col. 6, lines 35-67; col. 7, lines 20-55).

Regarding Claim 4, the combined system of Vilmur and Leung discloses all aspects of the claimed invention set forth in the rejection of Claim 1 as described above. Vilmur further discloses automatically store the scramble codes in said memory means (see FIG. 1, Logic and control circuit 132; see col. 4, lines 55-65; see col. 5, lines 10-25; 44-55; see col. 6, lines 35-67; col. 7, lines 20-55).

Regarding Claim 15, the method claim, which has substantially disclosed all the limitations of the respective system claim 1. Therefore, it is subjected to the same rejection.

Regarding Claim 17, the method claim, which has substantially disclosed all the limitations of the respective system claim 3. Therefore, it is subjected to the same rejection.

Regarding Claim 18, the method claim, which has substantially disclosed all the limitations of the respective system claim 4. Therefore, it is subjected to the same rejection.

Regarding Claim 29, the program claim, which has substantially disclosed all the limitations of the respective system claim 1. Therefore, it is subjected to the same rejection.

Regarding Claim 31, the program claim, which has substantially disclosed all the limitations of the respective system claim 3. Therefore, it is subjected to the same rejection.

Regarding Claim 32, the program claim, which has substantially disclosed all the

limitations of the respective system claim 4. Therefore, it is subjected to the same rejection.

5.   Claims 2,5,6,7,16,19,20,21,30,33,34,35 and 43 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Vilmur in view of Leung, as described above in claims 1, 15 and 29, and

further in view of Seppanen (U.S. 5,903,832).

Regarding Claim 2, the combined system of Vilmur and Leung discloses all aspects

of the claimed invention set forth in the rejection of Claim 1 as described above.

Neither Vilmur nor Leung explicitly discloses storing in response to user operation.

However, the above-mentioned claimed limitations are taught by Seppanen. In particular,

Seppanen teaches storing the codes (see Fig. 24, plurality of data blocks 25_1-25_n; see col. 5,

line 66 to col. 5, line 9; note that various cellular system parameter and the number

assignments identifies each network (i.e. a network/cell code)) in said memory means in

response to user operation (see Fig. 3A, and 4B; col. 4, line 16-53; each user has a capability

to "manually" select and store the preferred system parameters (i.e. network/cell site) in the

memory (see Fig. 24, Memory 24) of a mobile station.)

In view of this, having the combined system of Vilmur and Leung, and then given the

teaching of Seppanen, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to modify the combined system of Vilmur and Leung, by

providing a mechanism for a user to select and store preferred cell site/network, as taught by

Seppanen. The motivation to combine is to obtain the advantages/benefits taught by

Seppanen since Seppanen states at col. 3, line 40-45 that such modification would make it

possible to provide an efficient and simple technique for enabling a user of a mobile terminal

or station to manage, prioritize, and select between available systems.

Regarding Claim 5, the combined system of Vilmur and Leung discloses all aspects

of the claimed invention set forth in the rejection of Claim 1 as described above.

Neither Vilmur nor Leung explicitly discloses storing upon assigning priorities.

However, the above-mentioned claimed limitations are taught by Seppanen. In particular,

Seppanen teaches storing the codes (see Fig. 24, plurality of data blocks 25_1-25_n; see also col.

5, line 66 to col. 5, line 9; note that various cellular system parameter and the number

assignments identifies each network (i.e. a network/cell code)) in the memory means upon

assigning priorities (see col.3, line 1-30; col. 4, line 5-29; the mobile station automatically

prioritizes various network/cell sites (i.e. home area being a higher priority than others) in the

memory (see Fig. 24, Memory 24), or the user manually prioritizes various network/cell sites

by selecting and storing in the memory.)

In view of this, having the combined system of Vilmur and Leung, and then given the

teaching of Seppanen, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to modify the combined system of Vilmur and Leung, by

providing a mechanism for a mobile station to automatically store the cell sites/networks

according to the priorities, as taught by Seppanen. The motivation to combine is to obtain the

advantages/benefits taught by Seppanen since Seppanen states at col. 3, line 45-50 that such

modification would make it possible to provide a mobile terminal or station to have

automatic network selection capability and temporary network selection capability by

network name and a capability for setting parameters and priorities of networks.

Regarding Claim 6, the combined system of Vilmur, Leung and Seppanen discloses all aspects of the claimed invention set forth in the rejection of Claims 1 and 5. Vilmur discloses performing cell detection by preferentially using the codes (see col. 5, lines 20-40; see col. 7, lines 20-55). Moreover, Seppanen teaches performing cell detection by preferentially using the codes (see Fig. 24, plurality of data blocks 25_1-25_n; see also col. 5, line 66 to col. 5, line 9; note that various cellular system parameter and the number assignments identifies each network (i.e. cell site);) stored in the memory means (see col.3, line 1-30; col. 4, line 29-53 and col. 7, line 54 to col. 8, line 50; the user manually prioritizes various network/cell sites by selecting/preferring and storing in the memory. Once the user stores the selected/preferred cell/network in the memory, the mobile station performs cell detection and registration according to the list of selected/preferred cell or network site.)

In view of this, having the combined system of Vilmur and Leung, and then given the teaching of Seppanen, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Vilmur and Leung, by providing a mechanism for a mobile station to performs cell detection and registration according to the selected/preferred cell/network site, as taught by Seppanen. The motivation to combine is to obtain the advantages/benefits taught by Seppanen since Seppanen states at col. 3, line 45-50 that such modification would make it possible to enable a user of a mobile terminal or station to manage, prioritize, and select between available systems.

Regarding Claim 7, the combined system of Vilmur, Leung and Seppanen discloses all aspects of the claimed invention set forth in the rejection of Claims 1, 5, and 6 as described above. Vilmur discloses a plurality of codes, stored in the memory means (see col.

6, lines 20-34; see col. 5, lines 20-55; col. 7, lines 20-55). Seppanen teaches a plurality of

codes (see Fig. 24, plurality of data blocks 25_1-25_n; see also col. 5, line 66 to col. 5, line 9;

note that various cellular system parameter and the number assignments identifies each

network (i.e. cell site)), stored in the memory means, in the descending order of priorities

(col. 4, line 16-28; the cell/network site list stored in the memory is prioritized is such as way

that the higher the level on the list, the higher the priorities (i.e. the high priority to low

priority on the list), and thus it is prioritized in descending order.)

In view of this, having the combined system of Vilmur and Leung and then given the

teaching of Seppanen, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to modify the combined system of Vilmur and Leung, by

providing a mechanism for a mobile station to store the cell sites/networks according by

priorities from high to low, as taught by Seppanen, for the same motivation that stated above

in Claim 5.

Regarding Claim 16, the method claim, which has substantially disclosed all the

limitations of the respective system claim 2. Therefore, it is subjected to the same rejection.

Regarding Claim 19, the claim, which has substantially disclosed all the limitations

of the respective claim 5. Therefore, it is subjected to the same rejection.

Regarding Claim 20, the claim, which has substantially disclosed all the limitations

of the respective claim 6. Therefore, it is subjected to the same rejection.

Regarding Claim 21, the claim, which has substantially disclosed all the limitations

of the respective claim 7. Therefore, it is subjected to the same rejection.

Regarding Claim 30, the program claim, which has substantially disclosed all the limitations of the respective system claim 2. Therefore, it is subjected to the same rejection.

Regarding Claim 33, the claim, which has substantially disclosed all the limitations of the respective claim 5. Therefore, it is subjected to the same rejection.

Regarding Claim 34, the claim, which has substantially disclosed all the limitations of the respective claim 6. Therefore, it is subjected to the same rejection.

Regarding Claim 35, the claim, which has substantially disclosed all the limitations of the respective claim 7. Therefore, it is subjected to the same rejection.

Regarding Claim 43, the claim, which has substantially disclosed all the limitations of the respective claim 5. Therefore, it is subjected to the same rejection.

6.   Claims 11, 12, 25,26,39,40,49,50,54 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vilmur in view of Leung and Seppanen as applied to claims 6, 20, and 34 above, and further in view of Nystrom (U.S. 6,526,091).

Regarding claim 11, the combined system of Vilmur, Leung and Seppanen discloses wherein the detection step comprises the step of performing cell detection by preferentially using a scramble code which is stored in the memory means as stated above in Claims 1,5, and 6.

Neither Vilmur, Leung, nor Seppanen explicitly discloses specifying a scramble code group at the time of detection of the scramble code, and the step of performing cell detection by using a scramble code, which belongs to the specified scramble code group.

However, the above-mentioned claimed limitations are taught by Nystrom'091. In particular, Nystrom'091 teaches specifying a scramble code group at the time of detection of the scramble code, and the step of performing cell detection by using a scramble code, which belongs to the specified scramble code group (see col. 3, line 29 to col. 4, line 9; note that MS or remote terminal detects/searches and identifies one or more BSs (or cells sites) utilizing scrambling code groups which are assigned to the scrambling codes).

In view of this, having the combined system of Vilmur, Leung and Seppanen, then given the teaching of Nystrom'091, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Vilmur, Leung and Seppanen, by providing a mechanism to detect/search scrambling code groups which are assigned to each scrambling codes before searching each individual scrambling code, as taught by Nystrom'091. The motivation to combine is to obtain the advantages/benefits taught by Nystrom'091 since Nystrom'091 states at col. 3, line 29-44 that such modification would make it possible to efficiently help search/synchronize the remote terminal to the BS and identify the BS-specific scrambling code and improves such synchronization channels in terms of both performance and MS complexity.

Regarding claim 12, the combined system of Vilmur, Leung and Seppanen discloses wherein the detection step comprises the step of performing cell detection in accordance with a priority of a scramble code, which is stored in the memory means as stated above in claims 6.

Neither Vilmur, Leung, nor Seppanen explicitly discloses specifying a scramble code group at the time of detection of the scramble code, and the step of performing cell detection

by using a scramble code, which belongs to the specified scramble code group. However, the

above-mentioned claimed limitations are taught by Nystrom'091. In particular, Nystrom'091

teaches specifying a scramble code group at the time of detection of the scramble code, and

the step of performing cell detection by using a scramble code, which belongs to the

specified scramble code group (see col. 3, line 29 to col. 4, line 9; note that MS or remote

terminal detects/searches and identifies one or more BSs (or cells sites) utilizing scrambling

code groups which are assigned to the scrambling codes).

In view of this, having the combined system of Vilmur, Leung and Seppanen, then

given the teaching of Nystrom'091, it would have been obvious to one having ordinary skill

in the art at the time the invention was made to modify the combined system of Vilmur,

Leung and Seppanen, by providing a mechanism to detect/search scrambling code groups

which are assigned to each scrambling codes before searching each individual scrambling

code, as taught by Nystrom'091 for the same motivation as stated above in claim 11.

Regarding Claim 25, the claim, which has substantially disclosed all the limitations

of the respective claim 11. Therefore, it is subjected to the same rejection.

Regarding Claim 26, the claim, which has substantially disclosed all the limitations

of the respective claim 12. Therefore, it is subjected to the same rejection.

Regarding Claim 39, the claim, which has substantially disclosed all the limitations

of the respective claim 11. Therefore, it is subjected to the same rejection.

Regarding Claim 40, the claim, which has substantially disclosed all the limitations

of the respective claim 12. Therefore, it is subjected to the same rejection.

Regarding Claim 49, the claim, which has substantially disclosed all the limitations

of the respective claim 11. Therefore, it is subjected to the same rejection.

Regarding Claim 50, the claim, which has substantially disclosed all the limitations

of the respective claim 11. Therefore, it is subjected to the same rejection.

Regarding Claim 54, the claim, which has substantially disclosed all the limitations

of the respective claim 11. Therefore, it is subjected to the same rejection.

Regarding Claim 55, the claim, which has substantially disclosed all the limitations

of the respective claim 11. Therefore, it is subjected to the same rejection.

7.   Claims 13, 14, 27,28,41,42,44-47,51,52,56 and 57 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Vilmur in view of Leung, as applied to claims 1, 15 and 29 above, and

further in view of and Nystrom (U.S. 6,526,091).

Regarding claim 13, the combined system of Vilmur, Leung discloses wherein the

detection means is configured to specify a scramble code at the time of detection of a

neighboring cell in a handover state (see Vilmur, see col. 3, lines 14-22, 33-40; see col. 4,

lines 39-40; see col. 6, lines 35-44; hand-off). Vilmur also discloses storing a scramble code

of the neighboring cell in said memory means as described above in claim 1. Vilmur

discloses performing cell detection by preferentially using the codes (see col. 5, lines 20-40;

see col. 7, lines 20-55).

Neither Vilmur nor Leung explicitly discloses specifying a scramble code group at

the time of detection of the scramble code, and the step of performing cell detection by using

a scramble code, which belongs to the specified scramble code group.

However, the above-mentioned claimed limitations are taught by Nystrom'091. In particular, Nystrom'091 teaches specifying a scramble code group at the time of detection of the scramble code, and the step of performing cell detection by using a scramble code, which belongs to the specified scramble code group (see col. 3, line 29 to col. 4, line 9; note that MS or remote terminal detects/searches and identifies one or more BSs (or cells sites) utilizing scrambling code groups which are assigned to the scrambling codes).

In view of this, having the combined system of Vilmur and Leung, then given the teaching of Nystrom'091, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the combined system of Vilmur and Leung, by providing a mechanism to detect/search scrambling code groups which are assigned to each scrambling codes before searching each individual scrambling code, as taught by Nystrom'091. The motivation to combine is to obtain the advantages/benefits taught by Nystrom'091since Nystrom'091states at col. 3, line 29-44 that such modification would make it possible to efficiently help search/synchronize the remote terminal to the BS and identify the BS-specific scrambling code and improves such synchronization channels in terms of both performance and MS complexity.

Regarding claim 14 the combined system of Vilmur and Leung discloses wherein said control means performs control using a scramble/encrypted code and storing scramble code in memory means as described above in claim 1 above. Vilmur discloses performing cell detection by preferentially using the codes (see col. 5, lines 20-40; see col. 7, lines 20-55).

Neither Vilmur nor Leung explicitly discloses specifying a scramble code group by

using a scramble code group to which a scramble code stored, when said detection means

specifics a scramble code group.

However, the above-mentioned claimed limitations are taught by Nystrom'091. In

particular, Nystrom'091 teaches specifying a scramble code group by using a scramble code

group to which a scramble code stored, when said detection means specifics a scramble code

group (see col. 3, line 29 to col. 4, line 9; note that MS or remote terminal first

detects/searches and identifies/specifies one or more BSs (or cells sites) utilizing scrambling

code groups which are assigned to the scrambling codes in order to specify/identify any

particular scramble code stored in each group memory). Also, it is well known in the art of

searching mechanism in memory structure, first one must preferentially search a group name

(i.e. a file folder name) of any particular member, ID, name, or code (i.e. a file name), since

each group is uniquely identified by each group category. Once the group is identified, any

particular member, ID, name, or code is searched and identified.

Similar scenario applies to memory searching mechanism of Vilmur, Leung, and

Nystrom'091. First, a scramble group is preferentially searched/specified in the list of

scramble code groups when searching/specifying any particular scramble code. In view of

this, having the combined system of Vilmur and Leung, then given the teaching of

Nystrom'091, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to modify the combined system of Vilmur and Leung, by providing a

mechanism to detect/search scrambling code groups which are assigned to each scrambling

codes before searching each individual scrambling code, as taught by Nystrom'091. The

motivation to combine is to obtain the advantages/benefits taught by Nystrom'091since

Nystrom'091states at col. 3, line 29-44 that such modification would make it possible to

efficiently help search/synchronize the remote terminal to the BS and identify the BS-specific

scrambling code and improves such synchronization channels in terms of both performance

and MS complexity. Also, the motivation to combine is to obtain the advantages/benefits

taught by well established teaching in art since well established teaching in art teaches hat

such modification would make it possible to increase the speed of searching any particular

file/item in the memory, by first preferentially searching/specifying a group/folder.

Regarding Claim 27, the claim, which has substantially disclosed all the limitations

of the respective claim 13. Therefore, it is subjected to the same rejection.

Regarding Claim 28, the claim, which has substantially disclosed all the limitations

of the respective claim 14. Therefore, it is subjected to the same rejection.

Regarding Claim 41, the claim, which has substantially disclosed all the limitations

of the respective claim 13. Therefore, it is subjected to the same rejection.

Regarding Claim 42, the claim, which has substantially disclosed all the limitations

of the respective claim 14. Therefore, it is subjected to the same rejection.

Regarding Claim 44, the claim, which has substantially disclosed all the limitations

of the respective claim 13. Therefore, it is subjected to the same rejection.

Regarding Claim 45, the claim, which has substantially disclosed all the limitations

of the respective claim 13. Therefore, it is subjected to the same rejection.

Regarding Claim 46, the claim, which has substantially disclosed all the limitations

of the respective claim 14. Therefore, it is subjected to the same rejection.

Regarding Claim 47, the claim, which has substantially disclosed all the limitations

of the respective claim 14. Therefore, it is subjected to the same rejection.

Regarding Claim 51, the claim, which has substantially disclosed all the limitations

of the respective claim 14. Therefore, it is subjected to the same rejection.

Regarding Claim 52, the claim, which has substantially disclosed all the limitations

of the respective claim 14. Therefore, it is subjected to the same rejection.

Regarding Claim 56, the claim, which has substantially disclosed all the limitations

of the respective claim 14. Therefore, it is subjected to the same rejection.

Regarding Claim 57, the claim, which has substantially disclosed all the limitations

of the respective claim 14. Therefore, it is subjected to the same rejection.

Allowable Subject Matter

8.   Claims 8-10, 22-24, 36-38, 48, 53,58-63 are allowed.
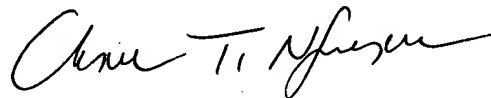

Conclusion

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The

examiner can normally be reached on M-F: 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Chau T. Nguyen can be reached on 571-272-3126. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

INM
7/13/05

CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600